

WHAT IS CLAIMED IS:

1. A crystal oscillator with an improved shock resistance, comprising:

an oscillator main body with a pair of supporting protuberances formed therein, a conductive adhesive being spread on the supporting protuberances;

a quartz blank with its supporting part bonded onto the conductive adhesive of the supporting protuberances;

a cover secured upon the quartz blank; and

an insulating resin layer spread between the cover and the quartz blank, for elastically pressing down the conductive adhesive.

2. The crystal oscillator as claimed in claim 1, wherein the insulating resin layer disposed upon the supporting part of the quartz blank is made of epoxy resin.

3. The crystal oscillator as claimed in claim 1, wherein the insulating resin layer disposed upon the supporting part of the quartz blank is formed on side parts of the quartz blank.

4. The crystal oscillator as claimed in claim 1, wherein the insulating resin layer disposed upon the supporting part of the quartz blank is formed on an

entire top and on entire sides of the quartz blank.

5. The crystal oscillator as claimed in claim 1, wherein the insulating resin layer disposed upon the supporting part of the quartz blank is formed on parts of the top and on parts of the sides of the quartz blank.

6. The crystal oscillator as claimed in claim 1, wherein the insulating resin layer disposed upon the supporting part of the quartz blank is formed only on entire sides of the quartz blank.

7. A crystal oscillator with an improved shock resistance, comprising:

a supporting part;

a pair of connecting parts extended from the supporting part; and

a pair of bridge parts elongately extending from the connecting parts,

wherein a width of each of the connecting parts is longer than a width of each of the bridge parts,

wherein an outer edge of each of the connecting parts consist of a parallel part which is straightly extended from an outer edge of the supporting parts and a slant to an outer edge of the bridge parts.

8. The crystal oscillator as claimed in claim 7,

wherein a length of the bridge parts is extended in proportion to a length of the connecting parts.

9. The crystal oscillator as claimed in claim 8, wherein a ratio of a length of the connecting parts to the extended length of bridge parts is 2.5~3.0 : 1.

10. The crystal oscillator as claimed in claim 7, wherein the bridge parts have a width decreased by $1/8 \sim 1/9$ compared with a length of the connecting parts.

11. A crystal oscillator with an improved shock resistance, comprising:

an oscillator main body with a pair of supporting protuberances projecting within it, and a conductive adhesive spread on the supporting protuberances;

a quartz blank consisting of: i) a supporting part for being bonded onto the supporting protuberances across the conductive adhesive; ii) a pair of connecting parts extending from the supporting part; and iii) a pair of bridge parts extending from the pair of the connecting parts respectively;

a cover for being secured upon the quartz blank; and

an insulating resin layer for elastically pressing down the conductive adhesive between the quartz blank and the supporting protuberances,

wherein a width of each of the connecting parts is longer than a width of each of the bridge parts,

wherein an inside edge of the connecting parts is straightly aligned with an inside edge of each of the bridge parts,

wherein an outer edge of each the connecting parts consist of a parallel part which is straightly extended from an outer edge of the supporting part and slant part slants to an outer edge of the bridge parts.